

ABSTRACT

A large number of holes are formed in a two-layered porous film sandwiched between a lower substrate and an upper substrate and filled with a light transmitting liquid and fine particles. When a voltage is applied between an upper electrode and a lower electrode, migration of the fine particles, takes place based on electrophoresis. White color is displayed when the fine particles are located on an upper transparent porous film side and black color is displayed when the fine particles are located on a lower black porous film side. Color display is also possible by periodically repeating three primary colors of RGB in the lower layer porous film or arranging a color filter on the transparent upper substrate. Bubbles-containing fine particles or bubbles themselves may be employed in place of the fine particles.